A Spin-Offs journey into achieving marketable products from bacterial cellulose

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Academic spin-offs, technological ventures born inside Universities, have increasingly strengthen the connections between the scholarship and the economy, by fostering the role of technology transfer and knowledge commercialization. This presentation will outline the major steps in taking an idea or a technology to market, growing the venture and aiming at securing a successful exit. Also, it will present BCTechnologies (Bacterial Cellulose Technologies), a spin-off from the University of Minho (Portugal). BCTechnologies (BCT) aims to operate in the fields of Biotechnology and Biomedic Engineering, through exploring bacterial cellulose (BC), an outstanding polymer synthesized by *Gluconacetobacter xylinus* to yield a 3D nanofibrilar pure cellulosic network. BC has high tensile strength, in situ moldability, water holding capacity and it is biocompatible. These unique properties allowed exploring its potential mostly in the biomedical field, where temporary skin substitutes and artificial blood vessels appear as patented products [1]. However, the use of BC in food applications, specifically in the development of new food products, is virtually unexploited; the major limitation of this concerns with the BC's industrial production costs.

Through R&D activities, networking & partnering with industry, BCT aims to bring new and improved solutions, based on BC, to the food sector, biomedical, composites, pulp and paper industries. Examples of successful product development and industry networking in the food sector will be shown. Finally, plans to produce and commercialize bacterial cellulose for food applications, through a cost-effective production system, will be presented.

[1] F. Andrade, R. Pertile, F. Dourado, F. Gama, in: A. Lejeune, T. Deprez (Eds.) Cellulose: Structure and Properties, Derivatives and Industrial Uses, Nova Science Publishers Inc., New York, 2010, pp. 427.